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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/734,352
Filing Date: December 11, 2003
Appellant(s): SALONEN, JUKKA

Michael Mutter
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 25 January 2010 appealing from the Office action mailed 28 May 2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 19 and 21-23 are pending and rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the

appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading “WITHDRAWN REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The rejection of claims 19 and 21-23 under 35 U.S.C. § 112, First Paragraph, has been withdrawn.

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant’s brief.

(8) Evidence Relied Upon

6,085,100	Tarnanen	07-2000
2002/0028686	Kagi	03-2002
7,149,537	Kupsh et al	12-2006

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tarnanen [US 6,085,100] in view of Kagi [US 2002/0028686] and Kupsch et al [US 7,149,537].

As per **claims 19 and 22**, Tarnanen discloses a) assigning a unique reply address to an SMS message from a multiplicity of available reply addresses [col 2, lines 34-37, and col 7, lines 21-41];

b) sending the SMS message to the client at the client identifier address [Fig. 5, step 40]; and

c) replying to the SMS message at the unique reply address [Fig. 6, step 50].

Tarnanen does not disclose when a SMS message is received at the unique reply address authenticating the client. However, Kagi discloses when a SMS message is received at the unique reply address authenticating the client [0029]. It would have been obvious to one of ordinary skill in the art to include in the SMS communication system of Tarnanen the ability to authenticate the client as taught by Kagi since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Tarnanen discloses assigning a unique reply address to an SMS message from a multiplicity of available reply addresses [col 2, lines 34-37, and col 7, lines 21-41]. The sole difference between Tarnanen and the claimed subject matter is that Tarnanen does not disclose that the reply addresses are predefined. However, Kupsh et al discloses that the reply addresses are predefined [col 6, lines 17-30]. Kupsh et al shows that the use of a predefined reply address for SMS messaging was known in the prior art at the time of the invention. Since each individual element and its function are shown in the prior art, albeit shown in separate references, the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself -- that is in the substitution of the predefined address of Kupsh et al for the reply address of Tarnanen. Thus, the simple substitution of one known element for another producing a predictable result renders the claim obvious.

As per **claim 21**, Tarnanen further discloses wherein the method further includes storing the reply in a matrix including a first axis indexed by client calling line identifier number and a second axis indexed by reply address [col 6, lines 19-57; Fig. 4].

As per **claim 23**, Tarnanen further discloses wherein the client's identifier address includes an identifier chosen from the group consisting of a client's A-subscriber's number, Calling Line Identity, e-mail address and IP address [col 6, lines 27-30].

(10) Response to Argument

Appellant argues, "Claim 19 is patentable over the combination of Tarnanen, Kagi, and Kupsh for at least the reason that the combination fails to disclose or suggest "assigning a unique

reply address to an SMS message from a multiplicity of available predefined reply addresses” as recited in claim 19...First, Appellant disagrees with the Examiner’s assertion that Tarnanaen discloses “assigning a unique reply address to a SMS message from a multiplicity of available reply addresses.”...Tarnanen does not assign a replay address from a multiplicity of available reply address, but rather Tarnanen uniquely identifies the reply messages by modifying a single reply address “gaddr” with a time stamp “scts” as transmission, i.e., temporary source address of Tarnanen is simply generated by combining a current time code stamp with the gateway’s address. As a result there is only one possible (i.e., available) address to be assigned in Tarnanen. Therefore, Tarnanen cannot possibly be interpreted as selecting from a multiplicity of available predefined addresses as asserted by the Examiner.” First, Examiner notes that the Examiner has not asserted that Tarnanen discloses selecting from a multiplicity of available predefined addresses. Tarnanen was cited to teach that “assigning a unique reply address to a SMS message from a multiplicity of available reply addresses.” Specifically, Tarnanen discloses, “According to the GSM specification, the data essential for the **reply path in a short message received by the MS 1 includes the reply path availability data** (TP-Reply-Path parameter) and the address of the unit that transmitted the message to the SMSC (TP-Originating-Address) contained in the SMS-DELIVER data unit and the source address of the short message (RP-Originating-Address) contained in the RP-MT-DATA data unit of the SM-RP protocol. **If the SMS-DELIVER data unit comprises the TP-Reply-Path parameter, the reply path is available, otherwise the reply path is not available.** In the first embodiment of the invention, the address of the unit that transmitted the message to the SMSC (SMS-DELIVER:TP-Originating-Address) is the network address of the GA 3 that operates between the SMSC and the external network. The source

address of the short message (RP-MT-DATA:RP-Originating-Address) is the network address of the SMSC 2.

When a subscriber answers to a short message by means of the reply path function and the reply path is available according to the parameter, a reply message is formed by providing the parameter indicating the use of the reply path (SMS-SUBMIT:TP-Reply-Path) and by using the address of the unit that transmitted the short message to the SMSC, i.e. in the first embodiment of the invention the network address of the GA 3, as the TP-level destination address of the reply message (SMS-SUBMIT:TP-Destination Address=SMS-DELIVER:TP-Originating-Address).

Correspondingly, the source address of the short message, which in this case is the network address of the SMSC 2 that delivered the short message to the mobile station, is used as the RP-level destination address of the reply message (RP-MO-DATA:RP-Destination-Address=RP-MT-DATA:RP-Originating-Address). The reply message transmitted by the MS 1 is routed on the basis of the RP-level destination address to the SMSC 2 and from there to the GA 3 on the basis of the TP-protocol destination address. However, the GA 3 does not contain information required for routing the short message forward to the network address of the unit that transmitted the message to the GA, and therefore the delivery of the reply message fails.

FIG. 4 shows a record structure illustrating the arrangement according to the invention for routing short messages to the original source address. The GA 3 is provided with a database DB 4 where records related to the short messages are stored for a predetermined period. When the GA 3 forms a short message originating from an external source and terminating at an MS, it adds the record shown in FIG. 4 to the DB 4. The first field "daddr" of the record comprises the destination address of the short message formed in the GA, the address being the network address of the MS 1

in the present embodiment. **The second field "scts" of the record comprises the parameter used for identifying the short message, and in the present embodiment it is the time stamp of the short message service centre.** The third field "omaddr" of the record comprises the original source address of the message that in the present embodiment is the address of the unit that transmitted the message from an external network to the GA. (col 6, lines 20-37).

In the arrangement according to the invention, the address of the unit that delivered the short message terminating at the MS 1 to the SMSC (SMS-DELIVER:TP-Originating-Address), called hereinafter a temporary source address, is formed by supplementing the network address (gaddr) of the GA 3 with a service centre time stamp (scts). **As the subscriber answers to the short message, the aforementioned temporary source address is set as the TP-level destination address (SMS-SUBMIT:TP-Destination-Address) according to the determination of the reply path.** The reply message is routed in the network to the GA 3 on the basis of the beginning of the destination address of the reply message (gaddr). The GA uses the time stamp (scts) provided in the destination address field of the reply message and the network address (daddr) of the MS 1 given as the source address for the reply message to form an index on the basis of which it carries out a search in the DB 4. As a result of the search through the database, the original source address (omaddr) of the message is obtained and it is given as the new destination address of the reply message, and the message is forwarded.

In the above-described example, the identification of the reply message employs the service centre time stamp that is easily available in the GA 3. By means of the time stamp a short message can be typically identified with the accuracy of one second, and therefore in order to unequivocally identify a reply message in the GA, the search through the database is

carried out on the basis of the time stamp and the destination address of the short message. In the present case, the identifier unequivocally identifying the reply message consists of a combination of the time stamp and the destination address of the short message. The factor essential for the invention in the selection of the identifier is that the identifier identifies the reply message unequivocally in the originating element. In other respects, the identifier can be selected separately for each application.

The reply path is specific for each message according to the GSM specification. A record related to the short message is created during the formation of the short message and the data is stored in the GA for a predetermined time. The period of storage is preferably the validity period determined in the GSM specification for a short message, but the time of storage in the database can be selected specifically for each application.” (col 5, line 46-col 7, line 14)

Since Tarnanen discloses that only available reply paths are able to be utilized, it is clear that there is some selection made from among a number of available reply addresses. Furthermore, while it is true that Tarnanen discloses an embodiment where the time stamp may be used a partial identifier for the reply message, Tarnanen also discloses that any identifier that unequivocally identifies the message may be utilized as part of the reply path. Thus, Tarnanen discloses assigning a unique reply address to a SMS message from a multiplicity of available reply addresses.

Appellant further argues, “Nowhere in Kupsh is there any disclosure or suggestion of assigning/selecting a reply address from a group of available predefined

replay [sic] messages as claimed. Furthermore, the Examiner incorrectly asserts that Kupsh teaches that the originating address is used to generate the reply address. Although Kupsh teaches a system where a user can send an SMS message from a webpage of an Internet Gateway to a SMS-capable mobile device, Kupsh does not disclose using the originating address to generate a reply address. To the contrary, Kupsh teaches generating the reply address based on the unique tracking identification number associated with the user, e.g., REPLYIDXXXXXX@v.m, where XXXXXX is the unique tracking number." First, the Examiner notes that Tarnanen was cited to teach "assigning a unique reply address to an SMS message from a multiplicity of available reply addresses (as discussed above). Kupsh was only cited to show that it was old and well known in the art at the time of the invention to predefine a reply address. In particular, Kupsh discloses,

"At step 230, the sent message arrives at Internet Gateway 20. Internet Gateway 20 assigns a unique tracking identification number to the message and associates the unique tracking identification number with the user who sent the message. The tracking identification number may be of any form or combination of numbers and/or letters. As an example, the identification tracking number for a particular message may be "238723". The identification number is used by the message log system to track the sent message and its reply and to correlate the sent message and reply with the proper record in the message log as maintained in message database 21.

At step 240, the system generates an origination address of the message using the tracking identification number created in step 230. As an example, the

origination address may be in the form "REPLYIDXXXXXX@v.w" where "XXXXXX" indicates a placeholder for the identification tracking number and "v.w" is the domain name identifier of Internet Gateway 20. Continuing with the example above where the unique tracking identification number is "238732", the origination address would be "REPLYID238732@v.w". **As will be explained, the originating address will be used as the destination address by the recipient SMS-capable mobile device when replying to the message.**" (col 5, lines 6-30)

"At step 290, SMSC 12 receives a reply to the original message from the recipient. The destination address of the reply message is the "REPLYIDXXXXXX@v.w" address discussed above. SMSC sends this message (as it does all messages addressed to "v.w") to Internet Gateway 20.

At step 300, Internet Gateway 20 relates the destination address to the unique tracking identification number and writes the reply to the corresponding record maintained in database 21.

Internet Gateway 20 then preferably notifies the originator of the message (22 or 24) that a reply to the message has been received." (col 5, line 66-col 6, line 10)

Since the originating address generated the reply address, the reply address is predefined when the message is originated. Accordingly, it would have been *prima facie* obvious to substitute the predefined addresses of Kupsh in the system executing the method of Tarnanen that assigns a unique replay address from a multiplicity of addresses, since the elements and their functions were known in the art, albeit in separate references.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Shannon S Saliard/

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